

IN THE SPECIFICATION:

Please replace the first full paragraph under ‘Detailed Description of an Illustrative Embodiment’ on specification page 6 with the following replacement paragraph:

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Fig. 1 illustrates an A/C-D/C-F/C unit 100 that includes a direct oxidation fuel cell system 102, which is preferably a direct methanol fuel cell. The A/C-D/C-F/C unit 100 is preferably a portable unit that can be conveniently carried about, though more stationary units also fall within the scope of the invention. The A/C-D/C-F/C unit 100 has as inputs a D/C source input 104 by which the unit 100 may be connected to a direct current source, typically an automobile's cigarette lighter power outlet, as is illustrated in schematic form as block 108 in Fig. 1. The unit 100 also includes an A/C source input 114, by which the unit 100 may be connected to an alternating current source, typically a standard electrical outlet. The A/C input 114 and D/C input electrically connects the unit 100 to an external alternating current source 118 or external direct current source 108, respectively. A/C input 114 and D/C input 104 may be simple electrical connectors.

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Please replace the paragraph bridging specification pages 6 and 7 with the following replacement paragraph:

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A/C-D/C-F/C unit 100 includes a direct oxidation fuel cell system 102 with a fuel cell comprised of a membrane electrode assembly including a protonically conductive, electronically non-conductive membrane electrolyte (PCM) having an anode face and an opposing cathode face, disposed between an anode chamber and a cathode chamber. A catalyst coating is typically disposed upon usually both the anode and the cathode face of the PCM. When the fuel solution included in the fuel cell is introduced to the anode face of the membrane, the anodic disassociation of the fuel cell into carbon dioxide, protons and electrons occurs. A cathodic combination of protons, electrons and oxygen produces water. Protons pass through the membrane and electrons travel through an associated load whereby electric current is collected from the electricity generating reactions to provide electrical current to the load, thus providing the power of the fuel cell system 102. The direct oxidation fuel cell system further comprises fluidic systems and other assemblies and systems that can be used to regulate the operation of the fuel cell system 102. Details about the operation and composition of one direct oxidation fuel cell and fuel cell system may be found in commonly-owned United States Patent Application Serial No. 10/084,097, 6,924,055, issued August 2, 2005, filed on February 22, 2002, for a FUEL DELIVERY CARTRIDGE AND ANODIC FUEL RECEPTOR FOR A FUEL CELL, by Hirsch et al., though other direct oxidation fuel cells and fuel cell systems are also within the scope of the invention.

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Please replace the paragraph bridging specification pages 7 and 8 with the following replacement paragraph:

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The power combiner and conditioner 140 detects whether input signals from any of the power sources exist, and follows a procedure (discussed further herein with reference to Fig. 2) to determine which power source is to supply the power signal to the application device, and depending upon the source chosen, the power combiner and conditioner includes circuitry that appropriately processes and conditions the signal that is to be supplied for powering the application device (i.e. the mobile phone, laptop etc.), and/or for recharging the battery in the application device, or for recharging the internal charger battery 130. The power combiner and conditioner 140 may include electronic circuitry to step down voltages which are too high, to step up voltages that are too low, to filter any unacceptable or unnecessary frequency components, and to otherwise condition the signal so that it is compatible with the specifications of the application device (not shown). The tasks performed by the power combiner and conditioner 140 will depend on the signal from the power source and the power requirements of the application device 190 itself.

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Please replace the third full paragraph of specification page 10 with the following replacement paragraph:

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It should be understood that, in accordance with this aspect of the invention, the procedure 200 is used for determining the charging of the internal charger battery 130, as well as for direct charging of the application battery, and/or for powering the application device 190 itself, however, the procedure outlined in Fig. 2 can be readily adapted to perform similar steps in a different order, or to omit some functions while performing other functions in a different manner, depending upon the particular application device being used, and upon the wishes of the end user, and these adaptations can be made by reprogramming the microprocessor 136, while remaining within the scope of the invention. For example, the decision tree can be changed to select D/C power, or the fuel cell system as the first priority power supply, if that is desired in a particular application, and this is well within the scope of the present invention.

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Please replace the paragraph bridging specification pages 10 and 11 with the following replacement paragraph:

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Another aspect of the invention will be described with reference to Figs. 1 and 3. As noted herein, the A/C-D/C-F/C power system 100 of the present invention includes a power combiner and conditioner 140 (Fig. 1), and may be coupled to an optional modular

interface 192. The power combiner/conditioner 140 prepares the signal that is selected in accordance with the procedure of Fig. 2 to provide power to the intended application device. As will be understood by those skilled in the art, different application devices operate on different power supply voltages, i.e. a typical mobile phone operates on 3.6 volts, a typical personal digital assistant on 5 volts, and a mobile computer on 19.5 volts. Thus, it is desirable that a variety of voltage output levels be available to the end user of the ~~AC/DC/FCA/C-D/C-F/C~~ power system 100 so that it can be readily employed with any of a number of mobile electronic devices. The power combiner conditioner 140 includes the functionality to provide different power supply voltage levels, while the modular interface may include functionality for selecting which level is to be supplied to a particular application device.

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Please replace the second full paragraph of specification page 11 with the following replacement paragraph:

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Another alternative is to include circuitry in the modular interface 192 itself, which performs the voltage conversion. In this case the A/C-D/C-F/C system 100 may have only one voltage output, and each modular interface 192 for a given application device will provide the necessary voltage conditioning. In another embodiment of the invention, a “smart cable” 193 may be provided with the modular interface 192 that includes a set of pins, and predetermined pins are used to provide the desired voltage.

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Please replace the paragraph bridging specification pages 11 and 12 with the following replacement paragraph:

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Alternatively, and with reference to Fig. 3 power system 100 could include coupling ports 302, 304 and 306. Each port delivers a different power supply voltage for an application device. For example, a first power port 302 might deliver 3.6 v (volts), and the second port 304 may deliver 19.5 v, while the third port (306) is a 5 volt power supply. A coupling wire will include dedicated plugs at both ends of the coupling wire 194, one of which will provide an electrical connection to the A/C-D/C-F/C power system and the other which will provide the appropriate voltage to the application device. In order to prevent a delivery of an inappropriate voltage to a given application device only the connector for that a device requiring the associated voltage will fit into the appropriate port (302, 304 and 306) in the A/C-D/C-F/C system 100. Each port may also have a particular shape, or pin pattern, that couples only with the connector for that port, in order to protect application devices from being supplied with the incorrect voltage. Of course, there are other ways in which the correct voltage may be selected and supplied by the A/C-D/C-F/C system 100, as suggested herein, while remaining within the scope of the present invention.

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